# State Route1 Point Arena/Westport Sink Storm Damage Permanent Restoration Project

Locations
01-MEN-1 PM 14.85, PM 74.74, PM 75.89
47290

## Focused Initial Study
## with Proposed Negative Declaration

Prepared by the
State of California Department of Transportation

August 2008

Caltrans

# General Information About This Document

## *What's in this document?*

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed storm damage project located in Mendocino County, California. The document describes why the project is being proposed, the existing environment that could be affected by the project, and potential impacts from each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

## *What should you do?*

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans District 3 Office of Environmental Planning located at 2389 Gateway Oaks Drive, Suite 100, Sacramento, CA 95833 and at the Fort Bragg Library located at 499 East Laurel Street, Fort Bragg, CA 95437, phone (707) 964-2020, and at the Coast Community Library, located at 225 Main Street, Point Arena, CA 95468, phone (707) 882-3114
- We welcome your comments. If you have any concerns regarding the proposed project, send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

  Mr. Lupe Jimenez
  Environmental Branch Chief
  North Region
  California Department of Transportation MS #15
  P.O. Box 942874
  Sacramento, CA 94274-0001

- Submit comments via email to: Lupe_Jimenez@dot.ca.gov
- Submit comments by the deadline: September 19, 2008.

## *What happens next?*

After comments are received from the public and reviewing agencies, Caltrans may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Tammy Massengale, North Region Environmental Planning, P.O. Box 911, Marysville, CA 95901; (530) 741-4041 Voice, or use the California Relay Service TTY number, 1-800-735-2929.

**SCH:**
01-MEN-1 PM 14.85, PM 74.74, PM 75.89
**01-47290**

**Point Arena/Westport Sink Storm Damage**
**Permanent Restoration Project**
01-MEN-1 PM 14.85, PM 74.74, PM 75.89
**EA 01-47290**

# FOCUSED INITIAL STUDY with Proposed Negative Declaration

**Submitted Pursuant to: (State) Division 13, California Resources Code**
**(Federal) 42 USC 4332(2)(C)**

**THE STATE OF CALIFORNIA**
**Department of Transportation**

August 15, 2008
**Date of Approval**

J. D. Webb
**John D. Webb, Chief**
**North Region Environmental Services**
**California Department of Transportation**

**State of California**
**Department of Transportation**

SCH Number:
01-MEN-1 PM 14.85, 74.74, 75.89
**01-47290**

# Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

## *Project Description*

The heavy rains that occurred during the 2005/2006-winter season caused large amounts of erosion to occur at three locations along State Route (SR) 1 in Mendocino County. The pavement at post mile (PM) 14.85 in Point Arena failed from undermining and piping of stormwater through voids at failing joints of a large culvert. At PM 74.74 south of Westport, scour and headcutting (abrupt change in elevation causing erosion) at the outfall of a 24-inch (in) reinforced concrete pipe culvert has caused the loss of part of the roadway embankment as well as several sections of pipe. At PM 75.89, a portion of roadway has settled two to three feet as part of a larger landslide that includes the slopes above and below the road. Additionally, headcutting (abrupt change in elevation causing erosion) of the steep embankment under the outlet of the downdrains is working up toward the roadway and adds a considerable amount of erosion to the beach and bluff environment every time it rains.

## *Determination*

Caltrans has prepared a Focused Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- Would have minimal or no effect on agricultural resources, air quality, cultural resources, geology/soils, hazardous waste, land use/planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities/service systems.

- Would have a less than significant impact with the proposed mitigation for the following resources: biological resources, visual/aesthetics, and hydrology/water quality.

_____ _____

John D. Webb
Chief, Office of Environmental Services - South
North Region Environmental Planning
California Department of Transportation

Date

# Initial Study

### *Project Title*

Point Arena/Westport Sink Storm Damage Permanent Restoration Project

### *Lead Agency Name, Address and Contact Person*

California Department of Transportation
2389 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833
Mr. Lupe Jimenez, Chief Branch S-4
(916) 274-0557

### *Project Location*

This proposed storm damage permanent restoration project for State Route (SR) 1 is located at postmile (PM) 14.85, PM 74.74, and PM 75.89 in Mendocino County. The culvert at PM 14.85 is located within the town of Point Arena, south of Iverson Ave. The culvert at PM 74.74 is located south of the town of Westport, near Bruhel Point, south of Chadbourne Gulch. The culvert at PM 75.89 is located south of the town of Westport, between Bell Point and Chadbourne Gulch.

### *Project Sponsor's Name and Address*

California Department of Transportation
John Webb, Chief, North Region Office of Environmental Services
2389 Gateway Oaks Drive, Suite 100
Sacramento, CA 95833

### *Purpose*

The purpose of this project is to repair the roadway on SR 1 in Mendocino County at three locations between PM 14.85 to PM 75.89, in a way that will reduce the likelihood of the same problems occurring again at the same locations, thus, maintaining mobility across California.

### *Need*

The project is needed to maintain the mobility performance of SR 1 in three spot locations between PM 14.35 and PM 76.89. The roadway is considered at risk of failure due to storm damage and continued bluff and stream erosion from winter storms.

### *Alternatives*

There are two alternatives being studied, the "No Build" alternative and the proposed project, which is described below.

### *Description of Proposed Project*

This is a storm damage and permanent restoration project proposed for SR 1 at three locations in Mendocino County (PM 14.85, PM 74.74, and PM 75.89). The culvert at PM 14.85 conveys Point Arena Creek from the east to west, under SR 1. The culvert at PM 74.74 conveys hillside runoff from the drainage area above the roadway, under SR 1, to the hillside above the beach. The culvert at PM 75.89 conveys roadside runoff under SR 1, to the bluff above the beach. This project is necessary to restore the integrity of the roadway and the supporting embankments and to maintain the drainage facilities at these three locations.

**Post Mile 14.85**

The existing culvert where Point Arena Creek crosses SR 1 is a 6 ft x 6 ft concrete box 24-ft long with 6-ft diameter corrugated metal pipe (CMP) extensions at both ends for a total culvert length of 70-ft.

Work at this location includes replacing the CMP extensions with new 6 ft x 6 ft concrete box culvert of the same length, adding standard wingwalls and aprons to the entrance and exit, and patching the original concrete. Lengthening of the culvert is not being considered. Excavation will be by open trench from the adjacent roadway.

The total pavement width will remain unchanged at 25-ft. There will be no increase in impervious surface area.

Because the culvert is not being lengthened and any widening would replace highway fill rather than stream channel, permanent impacts are limited to the new wingwalls and aprons that will extend into the channel. Permanent impacts are 400-$ft^2$ -– concrete over the channel bottom, or 700- $ft^3$ of concrete below the Ordinary High Water Mark (OHWM).

Temporary impacts are created by vegetation removal for construction and check dams for water diversion. Vegetation removal is 3000-$ft^{2.}$ Check dams are 100- $ft^2$ of rock over the channel bottom, or 200- $ft^3$ of rock below OHWM.

**Post Mile 74.74**

Scour from the outfall of a 24-inch reinforced concrete pipe culvert on a 1:1 slope has caused severe headcutting (abrupt change in elevation causing erosion) into the highway embankment and the loss of several sections of pipe. Work at this location includes excavating a bench in the roadway and constructing a geosynthetic reinforced embankment, which consists of alternating layers of fill and fabric mesh with the fabric wrapped around the outside face like a stack of burritos, to the original line and grade. The new embankment will be 70-ft long, 40-ft wide and 20-ft high. The 70-ft by 20-ft face exposed to the ocean will be replanted. A 20-foot (ft) by 60-ft rock energy dissipater will be placed below the culvert outfall.

Total pavement width will remain unchanged at 24.5 ft. There will be no increase in impervious surface area.

A temporary road will be required to provide construction access to the outfall channel. The road will be 200-ft long by 8-ft wide, with 1:1 side slopes and a dirt surface. After construction, the access road will be re-graded to match the surrounding contours and replanted.

A temporary unpaved two-way traffic detour 600-ft long will be constructed around the outside shoulder of the highway curve. Most of the detour route is already a roadside pullout with a dirt surface, but it will be necessary to add 150-cu$^3$ of fill to provide super elevation. After roadway construction is complete, the pullout will be leveled and any hillside cuts made for the detour will be restored to their original slopes and replanted.

**Post Mile 75.89**

A 500-ft long section of two-lane roadway has settled two to three feet as part of a larger landslide that includes the slopes above and below the road. Among other things, cross drainage has been compromised because the drain inlet is no longer at the low point of the roadway. An unrelated problem exists at the same location, where there is a large scour hole below a 24-inch corrugated metal pipe downdrain.

Work at this location includes reconstructing the roadway with full depth asphalt-concrete (AC), regrading the roadside ditches, installing 600-ft of underdrain along the base of the cut

bank, and extending the downdrain 240-ft to the level of the beach. All work will be done from the roadway level.

Total pavement width will remain unchanged at 30-ft. There will be no increase in impervious surface area.

### *Surrounding Land Uses and Setting*

Elevation at the project site is approximately 10-ft above sea level at the Point Arena location, and approximately 150-ft above sea level at the other locations. SR 1 is adjacent to a very steep slope that is highly erosive at PM 74.74 and PM 75.89.

The first location, PM 14.85, is located where SR 1 crosses Point Arena Creek at the southern end of the City of Point Arena. The second location, PM 74.74, is located on SR 1 at the intersection with Bruhel Point Road approximately 2.6 miles south of the town of Westport. The third location, PM 75.89, is approximately 1.5 miles south of the town of Westport.

### *Zoning*

- PM 14.85 in the City of Point Arena: At this location, to the west of SR 1, the parcel is zoned agricultural exclusive, and the three parcels east of SR 1 are zoned highway commercial.

- At both PM 74.74 and PM 75.89, the land is zoned remote residential.

- At PM 14.85 and PM 74.74, temporary construction easements will be needed for construction of this project.

### *Permits and Approvals Needed*

Upon completion of final design for this project, the following agencies will be contacted in order to obtain their jurisdictional permits or approvals:

- United States Army Corps of Engineers (USACE): Clean Water Act of 1977, Section 404 Permit - Locations PM 14.85 and PM 74.74, Nationwide 14

- North Coast Regional Water Quality Control Board (NCRWQCB): Clean Water Act of 1977, Section 401 certification - Locations PM 14.85, 74.74

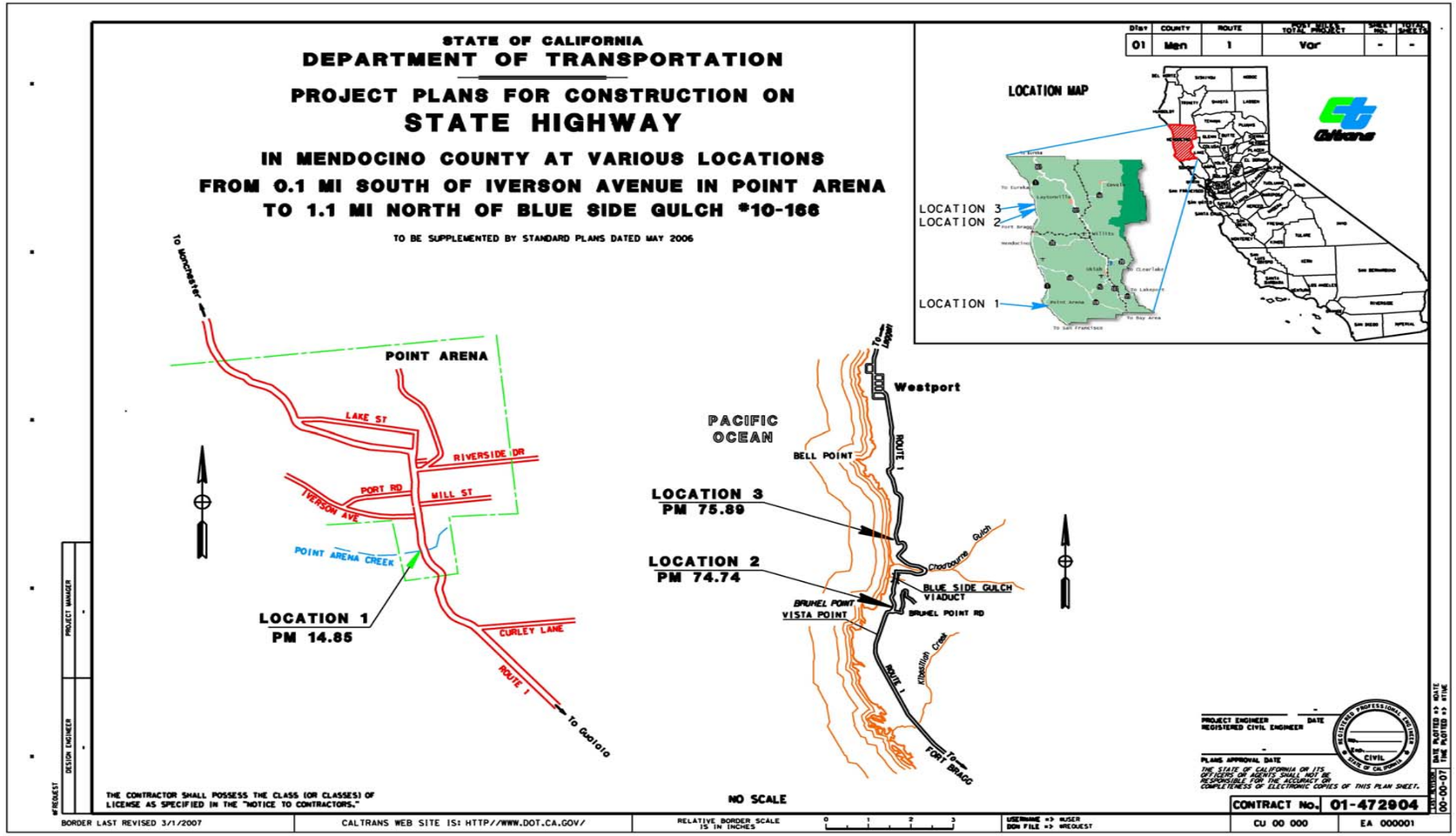
- California Department of Fish and Game: California Fish and Game Code 1602 Streambed Alteration Agreement - Locations- PM 14.85, 74.74

- Mendocino County Planning Commission: Coastal Development Permit - Locations – PM 74.74, 75.89

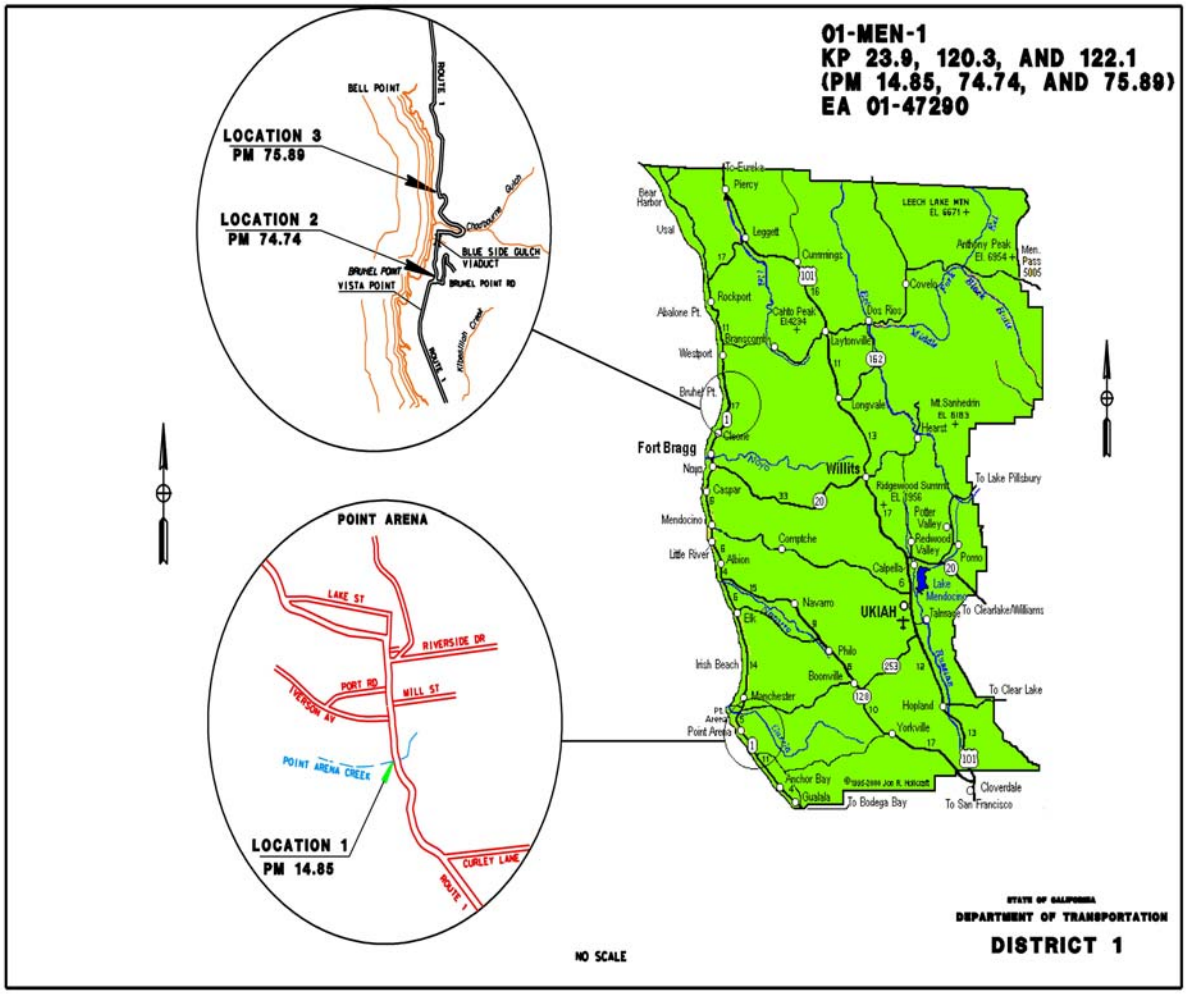
- City of Point Arena. Coastal Development Permit: Location PM 14.85

- State Water Resources Control Board permits

    1. Caltrans NPDES Permit Statewide Storm Water Permit and Waste Discharge Requirements
    2. NPDES General Permit Waste Discharge Requirements for Discharges of Storm Water Runoff associated with construction activity




***Project Location Map***




***Project Vicinity Map***

# Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages**:**

| | |
|---|---|
| [x] | Aesthetics |
| [ ] | Agricultural Resources |
| [ ] | Air Quality |
| [x] | Biological Resources |
| [ ] | Cultural Resources |
| [ ] | Geology/Soils |
| [ ] | Hazards and Hazardous Materials |
| [x] | Hydrology/Water Quality |
| [ ] | Land Use/Planning |
| [ ] | Mineral Resources |
| [ ] | Noise |
| [ ] | Population/Housing |
| [ ] | Public Services |
| [ ] | Recreation |
| [ ] | Transportation/Traffic |
| [ ] | Utilities/Service Systems |
| [ ] | Mandatory Findings of Significance |

# Impacts Checklist

The impacts checklist starting on the next page identifies physical, biological, social, and economic factors that might be affected by the proposed project. The California Environmental Quality Act impact levels include “potentially significant impact,” “less than significant impact with mitigation,” “less than significant impact,” and “no impact.”

A brief explanation of each California Environmental Quality Act checklist determination follows each checklist item. The checklist is followed by a focused discussion of biology, visual/aesthetics, and hydrology/water quality issues relating to this project.

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| **— I. AESTHETICS -** Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | x |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | x |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | x | ☐ |

***Discussion of impacts begins at the Visual/Aesthetics section of this Initial Study.***

| | | | | |
|---|---|---|---|---|
| d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☐ | x |

***"No Impact" determination in this section (a, b, d ) are based on the Visual Impact Assessment, May 2008.***

| | | | | |
|---|---|---|---|---|
| **II. AGRICULTURE RESOURCES —** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | x |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | x |
| c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on various field reviews in 2007.***

**III. AIR QUALITY —** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☐ | x |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☐ | ☐ | ☐ | x |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)? | ☐ | ☐ | ☐ | x |
| d) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☐ | x |
| e) Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on the Air Quality Report, June 2007.***

**IV. BIOLOGICAL RESOURCES —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | x | ☐ |

***Discussion of impacts beginss at the Biology section of this Initial Study***.

| | | | | |
|---|---|---|---|---|
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | x |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | x | ☐ |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| ***Discussion of impacts begins at the Biology section of this Initial Study.*** | | | | |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | x |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | x |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on the Natural Environmental Study, July 2008.***

**V. CULTURAL RESOURCES —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | ☐ | ☐ | ☐ | x |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☐ | x |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | x |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on the Historic Resource Compliance Report, September 2007.***

**VI. GEOLOGY AND SOILS —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | ☐ | ☐ | ☐ | **x** |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☐ | x |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☐ | x |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☐ | x |
| iv) Landslides? | ☐ | ☐ | ☐ | x |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☐ | x |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☐ | ☐ | ☐ | x |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. | ☐ | ☐ | ☐ | x |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on conversations with Project Engineer, December 2007.***

**VII. HAZARDS AND HAZARDOUS MATERIALS —**
Would the project:

| | | | | |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☐ | x |

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|

***All treated wood waste (TWW) from guardrails and some signs will either be re-used on-site or by Maintenance, or will be disposed of in an appropriate permitted facility. Additionally, TWW must be tracked by a combination of Caltrans approved reporting and record--keeping requirements in accordance with Department of Toxic Substances requirements.***

| | | | | |
|---|---|---|---|---|
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☐ | x |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | x |
| d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | x |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | x |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | x |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | x |
| h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | x |

***"No Impact" determination in this section is based on review of the Initial Site Assessment June 2007.***

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| **VIII. HYDROLOGY AND WATER QUALITY —** Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | ☐ | ☐ | x | ☐ |
| ***Discussion of impacts begins at the Storm Water/Water Quality section of this Initial Study.*** | | | | |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | ☐ | ☐ | x | ☐ |
| ***Discussion of impacts begins at the Storm Water/Water Quality section of this Initial Study.*** | | | | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or offsite? | ☐ | ☐ | x | ☐ |
| ***Discussion of impacts begins at the Storm Water/Water Quality section of this Initial Study.*** | | | | |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite? | ☐ | ☐ | ☐ | x |
| e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | ☐ | ☐ | ☐ | x |
| f) Otherwise substantially degrade water quality? | ☐ | ☐ | ☐ | x |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | x |
| h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? | ☐ | ☐ | ☐ | x |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☐ | ☐ | ☐ | x |
| j) Result in inundation by a seiche, tsunami, or mudflow? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on the Water Quality Report May 2008 and the Floodplain Analysis June 2007.***

**IX. LAND USE AND PLANNING —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Physically divide an established community? | ☐ | ☐ | ☐ | x |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | x |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on conversations with Project Engineer, December 2007.***

**X. MINERAL RESOURCES —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | x |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on conversations with Project Engineer 2007.***

**XI. NOISE —** Would the project result in:

| | | | | |
|---|---|---|---|---|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general | ☐ | ☐ | ☐ | x |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| plan or noise ordinance, or applicable standards of other agencies? | | | | |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☐ | x |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | x |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☐ | ☐ | ☐ | x |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | x |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on the Noise Report, June 2007.***

**XII. POPULATION AND HOUSING —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | x |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | x |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | x |

| Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|

***"No Impact" determinations in this section are based on the scope of the project and the project limits in the City of Point Arena.***

**XIII. PUBLIC SERVICES —**

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

| | | | | |
|---|---|---|---|---|
| Fire protection? | ☐ | ☐ | ☐ | x |
| Police protection? | ☐ | ☐ | ☐ | x |
| Schools? | ☐ | ☐ | ☐ | x |
| Parks? | ☐ | ☐ | ☐ | x |
| Other public facilities? | ☐ | ☐ | ☐ | x |

***A traffic management plan will be implemented during construction. "No Impact" determinations in this section are based on the scope and location of the project.***

**XIV. RECREATION —**

| | | | | |
|---|---|---|---|---|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | x |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on the scope and location of the project.***

**XV. TRANSPORTATION/TRAFFIC —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | ☐ | ☐ | ☐ | x |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☐ | ☐ | ☐ | x |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | x |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | x |
| e) Result in inadequate emergency access? | ☐ | ☐ | ☐ | x |
| f) Result in inadequate parking capacity? | ☐ | ☐ | ☐ | x |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☐ | x |

***As required in the Traffic Management Plan, traffic control during construction will accommodate bicycle traffic on this portion of the Pacific Coast Bike Route, and accommodate any bicycle races or private bike touring company activities.***

***"No Impact" determinations in this section are based on conversations with Project Engineer, November 2007 and June 2008.***

**XVI. UTILITY AND SERVICE SYSTEMS —** Would the project:

| | | | | |
|---|---|---|---|---|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | x |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | x |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | x |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☐ | ☐ | ☐ | x |
| e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | x |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☐ | x |

***All treated wood waste (TWW) from guardrails and some signs will either be re-used on-site or by Maintenance, or will be disposed of in an appropriate permitted facility. Additionally, TWW must be tracked by a combination of Caltrans approved reporting and record--keeping requirements in accordance with Department of Toxic Substances requirements.***

| | | | | |
|---|---|---|---|---|
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | x |

***"No Impact" determinations in this section are based on conversations with Project Engineer, November 2007 and June 2008.***

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE —**

| | | | | |
|---|---|---|---|---|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☐ | x |

| | Potentially significant impact | Less than significant impact with mitigation | Less than significant impact | No impact |
|---|---|---|---|---|
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☐ | ☐ | x |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☐ | x |

# Affected Environment, Environmental Consequences, and Mitigation Measures

## Biological Environment

## Biological Resources

### *Regulatory Setting*

Several federal, state, and local agencies have jurisdiction over the project site. The Clean Water Act (CWA) established the basic mandates for regulating discharges of pollutants into the waters of the United States. The CWA set requirements for water quality standards for all contaminants in surface waters. In 1999, the State Water Resources Control Board (SWRCB) issued a National Pollution Discharge Elimination System (NPDES) permit that regulates storm water discharges from Caltrans facilities. The permit requires Caltrans to maintain and implement an effective Storm Water Management Plan (SWMP) that identifies and describes the Best Management Practices (BMPs) used to control the discharge of pollutants to waters of the United States.

Upon completion of the final design for this project, the North Coast Regional Water Quality Control Board and Mendocino County Planning Department will be contacted to obtain their jurisdictional permits or approvals. Before construction begins, the project engineer will file a 30-day notice of construction required for the statewide NPDES permit.

Caltrans is required to comply with the Federal Migratory Bird Treaty Act and California Department of Fish and Game (CDFG) Code Sections 3503, 3513, and 3800 by having a qualified biologist survey any trees and shrubs to be removed or trimmed for active bird nests prior to the commencement of project related activities.

#### THREATENED AND ENDANGERED SPECIES

#### Regulatory Setting

California has enacted an endangered species act at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats.

Under Section 7 of the Federal Endangered Species Act, Caltrans is required to consult with the USFWS regarding potential effects to Point Arena Mountain Beaver (PAMB) at PM 14.85.

## Affected Environment

*Threatened and Endangered Species at PM 14.85*

The Point Arena mountain beaver (PAMB) is a federally listed endangered species, and is a State species of special concern. According to the Arcata US Fish and Wildlife Service (USFWS) Office website, PAMBs occur in a variety of habitat types including mesic coastal scrub, northern dune scrub, the edges of conifer forest, and riparian plant communities. Away from the coastal slope, PAMBs are found adjacent to redwood forests in riparian strips dominated by alder and sword fern. The breeding season for PAMB is December 15 through June 30.

*Wildlife at PM 14.85*

The vegetation removal outside the nesting period is not expected to effect migratory birds.

## Impacts to Wildlife

The federally listed Point Arena Mountain Beaver has been documented as occurring near PM 14.85. Habitat assessment and burrow surveys for the PAMB occurred on July 15, 2008 and a report was supplied to the US Fish and Wildlife Service (USFWS). The USFWS has provided technical assistance to Caltrans regarding potential impacts to this federally endangered species and concluded that the project does not have the potential to impact the PAMB.

## Avoidance, Minimization, and/or Mitigation Measures

*Migratory Birds*

Avoidance and minimization measures for this project will include removing vegetation outside the breeding season for migratory birds. If the vegetation removal cannot be scheduled to occur between September 1st and December 14th, then the contractor will be required to provide a qualified biologist to be onsite during vegetation removal and to conduct preconstruction surveys.

If Caltrans proceeds with tree and vegetation removal within the breeding season, surveys for birds and their nests will be conducted no more than 14 days prior to the initiation of construction activities during the early part of the breeding season, February through April;

and no more than 30 days prior to the initiation of these activities during the late part of the breeding season, May through August. If the biologist deems that an active bird nest is close enough to the construction area to be disturbed, the biologist will consult with CDFG to determine if a construction buffer zone is necessary.

Migratory bird protective measures will be included the plans and specifications for this project.

*Point Arena Mountain Beaver*

To avoid or minimize possible impacts to the federally endangered PAMB, work windows and Environmental Sensitive area (ESA) fencing will be in place in the plans and specifications for this project. ESA fencing will be required where needed to protect sensitive habitat.

The USFWS will likely request that Caltrans work at this location outside the breeding period for the PAMB to reduce possible effects to the species. This time period is usually from July 1st to December 14th. ESA fencing will be required along the environmental study limits so that there be no further impact to this sensitive habitat from vegetation removal or construction access. Signage will be attached to the fencing that will read, “Protected Area. Keep Out. Access With Permission Of Resident Engineer Only.” The ESA will also be identified and protected in the plans and specifications for this project. The USFWS has provided technical assistance to Caltrans regarding potential impacts to the PAMB. They have reviewed the focused survey report that was conducted at PM 14.85 and have responded to Caltrans in writing, stating that the project does not have the potential to impact the PAMB.

*Noxious Weeds*

Noxious weeds are present in this project area. To avoid the spread of noxious weeds, as well as aid in the replanting of native vegetation, several measures will be implemented including cleaning earthwork equipment prior to earthwork operations, ensuring that proposed borrow sites or stockpile areas are free from noxious weeds and invasive plants, and cleaning all equipment and vehicles thoroughly to remove dirt, seeds, vegetative material, or other potential seed harboring elements before arriving or leaving the project site.

To minimize re-introduction of additional non-native species into the area, weed-free erosion control applications will be used. For the re-vegetation seed mix, mix will be certified weed-free and contain appropriate native species. Any seeds used should be collected from the general project area.

Noxious weed prevention protective measures will be included in the plans and specifications for this project.

*Avoidance and Minimization Measures for Impacts to Natural Communities at PM 14.85 and PM 74.74*

Mitigation will consist of on-site re-planting of native vegetation and monitoring of the new plantings. If at PM 14.85 the existing vegetation does not re-establish itself to current mature height and density within 3 years, then re-establishment plantings will be installed. If re-establishment plantings are required, the vegetation will be replaced at a 3:1 ratio and the new plantings will be monitored for an additional two years.

The vegetation at PM 74.74 will be replaced at a 3:1 ratio and the new plantings be monitored for three years. If after three years the plantings are not successful and have not achieved at least 80% survival, Caltrans will be required to plant additional vegetation and ensure it's survival for at least another two years. Caltrans will provide monitoring reports and photographic evidence to the resource agencies for the three to five-year period.

## Cumulative Effects

The reasonably foreseeable actions that may continue to impact the common and sensitive wildlife species at each of the project locations are further erosion events, maintenance activities and urban development.

- Continued erosion:

  Erosion events cannot be controlled and when they occur, they can temporarily or permanently remove habitat for common and sensitive wildlife species.
- Urban development:

  Further development at PM 14.85 may continue to impact the habitat needed by the local PAMB population. Development has the potential to remove necessary burrowing habitat, forage, and introduce non-native predators.
- Maintenance activities:

  Maintenance activities conducted by private or governmental entities have the potential to temporarily impact habitat. Caltrans has installed permanent ESA

markers from PM 14.50 to PM 14.80 to protect PAMB habitat. Caltrans conducts regular maintenance activities (e.g. roadside vegetation removal) outside of this permanent ESA but not within it.

## Waters and Wetlands

### Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, primarily CDFG and the Regional Water Quality Control Boards (RWQCB) regulate wetlands and waters. In certain circumstances, the California Coastal Commission may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required.

The tops of the stream or lake banks, or the outer edge of riparian vegetation, usually define CDFG jurisdictional limits, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please refer to the Water Quality section for additional details. "Waters of the state" means any surface water or groundwater, including saline waters, within the boundaries of the state.

### Affected Environment

This project is anticipated to have minor temporary effects to Waters of the US at PM 14.85. Permanent effects are limited to the new wingwalls and aprons that will extend into the embankment because the culvert at this location is not being lengthened and any widening would replace highway fill rather than stream channel. Permanent effects will be from the 400 $ft^2$ of concrete over the channel bottom, or 700 $ft^3$ of concrete below the OHWM. The temporary check dams will consist of 100 $ft^2$ of rock and heavy plastic sheeting over the channel bottom, or 200 $ft^3$ of rock below OHWM.

The project will also have minor temporary effects to waters of the state at PM 14.85 and PM 74.74.

### Avoidance, Minimization, and Mitigation Measures

Work within the creek at PM 14.85 will be restricted to periods of low flow and dry weather, and generally between May 15th and October 15th. If the stream is flowing during construction, Caltrans must divert the entire stream flow around or through the work area during the excavation and/or construction activities, using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.

## Coastal Zone

### *Regulatory Setting*

The Coastal Zone Management Act of 1972 (CZMA) is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with approved coastal management plans are able to review federal permits and activities to determine if they are consistent with the state's management plan.

California had developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976 to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal CZMA delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments (15 coastal counties and 58 cities) to enact their own local coastal programs (LCPs). LCPs determine the short and long-term use of coastal resources in their jurisdiction consistent with the California Coastal Act goals.

Within the Mendocino County LCP, Chapter 20.496 of the coastal zoning code includes policies that apply to Environmentally Sensitive Habitat Areas (ESHAs). Buffer areas are described and defined in Section 20.496.020 as an area that shall be established adjacent to all ESHAs. The purpose of a buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100-ft, unless an applicant can demonstrate, after consultation and agreement with the CDFG (if applicable), and the Mendocino County Planning Staff, that 100-ft is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the environmentally sensitive habitat areas and shall not be less than 50-ft in width. This section describes a variety of standards for determining the allowable width of the buffer area, including standards for development permitted within the buffer area. Mendocino County Code Section 20.496.025(7) further specifies development that is allowed in wetlands, including incidental public service purposes.

Within the City of Point Arena Zoning Ordinance, Article 5 General Provision and Exceptions of the Zoning Ordinance includes policies that apply to Environmentally Sensitive Habitat Areas (ESHAs). Buffer areas are described and defined in Section 5.22 as an area that shall be established adjacent to all ESHAs. The purpose of a buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments and to ensure biological integrity.

The width of the buffer area shall be a minimum of 100-ft, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game (if applicable), and City of Point Arena Planning Staff, that 100-ft is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer from possible significant disruption caused by the proposed development. The buffer area shall not be less than 50-ft in width. This section describes a variety of standards for determining the allowable width of the buffer area, including standards for development permitted within the buffer area. City of Point Arena Zoning Ordinance Article 5 Section 5.23 describes the required wetland and environmentally sensitive habitat impact and mitigation requirements. City of Point Arena Zoning Ordinance Article 5 Section 5.24 states requirements for the Point Arena Mountain Beaver and the Mountain Beaver Buffer Area.

## Affected Environment

According to the Mendocino County LCP Chapter 20.496, highway activities can be allowed within ESHA buffers when avoidance is not feasible and when maintaining and improving SR 1 along its existing alignment presents the least impacts.

The following analysis is based on the development criteria for a reduced buffer zone required by and outlined in chapter 20.496 of the Mendocino County Coastal Zoning Code.

ESHA description follow under each postmile location below.

***For all three locations, and all 5 ESHAs:***

Mendocino County LCP and the local City of Point Arena Zoning Ordinance Article 5 define coastal scrub habitat. All three of the project sites occur within the Coastal zone, which extends approximately 100-ft beyond the project areas. Vegetation and natural communities of special concern that were observed within 100-ft of the project limits are discussed in the Natural Environmental Study (NES).

Description of ESHAs are located under each postmile location below. Please find ESHA mapping in Attachment 2.

## Potential Impacts

Temporary impacts due to vegetation being cut back will occur to the riparian channel in ESHA #3, at PM 74.74, and to the riparian channel in ESHA #4, at PM 14.85.

Permanent impacts due to rock slope protection will occur at ESHA #3 and permanent impacts will occur at ESHA #4 due to new culvert wingwalls and aprons.

For all the ESHAs, all or portions of them will be protected using Environmental Sensitive Area (ESA) fencing. Signage will be attached to the fencing that will read, "Protected Area. Keep Out. Access With Permission Of Resident Engineer Only." These ESA areas will also be shown and protected within the plans and contract specification for the project.

## PM 75.89

### Affected Environment

No special status plant species listed for Mendocino County were found to occur at or within 100-ft of the project location at PM 75.89. Botanical studies were conducted within the project limits extending 100-ft around the project footprint to satisfy the conditions of the Coastal Element of the Mendocino County General Plan. Due to the steepness of the location, not all of the 100-ft buffer area was covered on foot. Plants that could not be reached were assumed to be the same species as identical looking plants nearby.

Along the immediate east side of the highway, the terrain slopes upward at a steep gradient, and vegetative cover consists mostly of grasses. Further up the slope is coastal scrub dominated by coyote bush. The vegetation along the west shoulder of the highway is mostly comprised of various native and non-native grasses and forbs. The project vicinity is of relatively low biological value as it is dominated by invasive species. West of the right of way, the terrain is mostly unvegetated and slopes steeply toward the beach.

Field surveys identified an environmentally sensitive habitat area, ESHA #1 on the east side of the highway starting approximately 50-ft south of the drainage inlet at PM 75.89. This ESHA consists of a sparsely vegetated area and a seep located approximately five-ft above the pavement on the eroded cut slope /hillside. The total area of ESHA #1 is eight- $ft^2$. This ESHA has been identified due to the presence of water seeping from the cut slope. The seep is a coastal zone wetland as defined by the California Coastal Commission (CCC) and the County of Mendocino's Local Coastal Program (LCP).

### Potential Impacts

The ESHA #1 will not be directly impacted by the project. Construction activities that would occur within 100-ft of ESHA #1 include reconstructing the roadway with full depth AC, regrading the roadside ditches, installing 600-ft of underdrain along the base of the cut bank and hydroseeding the cut slope with native plants for erosion control.

Since the erosion occurred during the 2005/2006 winter, very little vegetation has re-grown on its own. Extension of the downdrain below the roadway and hydroseeding of the landslide face above the roadway will substantially reduce the amount of erosion that is occurring now.

## Avoidance, Minimization, and Mitigation Measures

For all disturbed soils a native seed mix will be used to encourage the re-introduction of native plants. The seed mix will mirror the native plant species that occur in or near the project vicinity. Weed-free mulch will also be used to reduce the risk of introducing noxious weeds.

To protect ESHA #1, temporary ESA fencing will be installed. This will prevent construction personnel and equipment from impacting this resource.

## PM 74.74

### Affected Environment

No special status plant species listed for Mendocino County were found to occur at or within 100-ft of the project location at PM 74.74. The special status plant and wildlife species that are known to occur in Mendocino County are provided in Attachment 1. Botanical studies were conducted within the project limits extending 100-ft around the project footprint to satisfy the conditions of the Coastal Element of the Mendocino County General Plan. Due to the steepness of the location, not all of the 100-ft buffer area was covered on foot. Plants that could not be reached were assumed to be the same species as identical looking plants nearby.

Along the immediate east side of the highway, the terrain slopes upward at a steep gradient, and vegetative cover consists mostly of willows. Further along the slope is coastal scrub dominated by coyote bush. West of the right of way, the terrain is vegetated with coastal scrub and some mixed riparian plants and slopes steeply toward the beach. The vegetation along the west shoulder of the highway is mostly comprised of coastal scrub, native and non-native grasses and forbs. The project vicinity is of moderate biological value as it supports native and non-native species. West of the right of way, the terrain is vegetated with coastal scrub and some mixed riparian plants and slopes steeply toward the beach.

Field surveys identified ESHA #2 on the east side of the highway starting approximately 100-ft north of the drainage inlet. This ESHA consists of a seep approximately five-ft above the pavement on the cut slope/hillside above the highway. The total area within ESHA #2 is

eight-ft$^2$. This ESHA has been identified due to the presence of water seeping from the hillside.

ESHA #2 consists of a vegetated area starting approximately 100 ft north of the drainage inlet at PM 74.74. The seep is approximately five feet above the pavement on the cut slope east of the highway.

ESHA #3 is a riparian area surrounding the drainage uphill from the existing culvert inlet and immediately downhill of the culvert outlet, located at PM 74.74. This ESHA consists of a culverted drainage that runs under the highway.

Field surveys identified a riparian area, ESHA #3 surrounding the drainage uphill from the existing culvert inlet and immediately downhill of the culvert outlet, located at PM 74.74. This ESHA consists of a culverted drainage that runs under the highway. The total area of ESHA #3 is 13,750- ft$^2$. The section of the ESHA that exists uphill of the drainage inlet, on the eastern side of the highway, is approximately 5,000- ft$^2$. The drainage area above the inlet supports a healthy population of willows and may be considered a habitat of concern by the resource agencies. The section of the ESHA that exists immediately downhill of the drainage outlet, on the western side of the highway, is approximately 8,750- ft$^2$. This ESHA has been identified due to the presence of riparian vegetation. The Mendocino LCP and the USACE could consider the area a wetland and habitat of concern. Above the drainage inlet is a wetland under the jurisdiction of both the Mendocino County LCP, which could also be considered waters of the United States (US) by the USACE.

### Potential Impacts

At PM 74.74, construction activities would not occur within 100-ft of ESHA #2. No work will impact this ESHA. The ESHA will be protected in the field, on project mapping and in the contract specifications with ESA fencing and signage. However, various construction activities will occur within 100-ft of ESHA #3 under the proposal. A temporary detour will be constructed around the outside shoulder and the highway curve and this will be within 30-ft of the eastern part of the ESHA. The work within 100-ft of ESHA #3 is on the downhill/western side of the highway. Work will include roadway work, installation of a new culvert outfall, reinforced embankment, excavating a bench in the roadway, constructing a geosynthetic re-enforced embankment, and constructing an energy dissipater below the culvert outfall. A temporary dirt road will be required to provide construction access to the outfall channel. ESA fencing will be placed along the eastern side of the highway at the base

of the uphill drainage channel to prevent any equipment or personnel from entering this section of ESHA #3.

Permanent impacts will occur to the riparian scrub in the drainage channel below the culvert outlet due to the installation of a rock energy dissipater. The rock energy dissipater will substantially reduce the amount of erosion currently being caused by high velocity flow coming from the culvert. Reconstruction of the failed roadway embankment with geosynthetic reinforcement will avoid impacts by creating a stable embankment that can be replanted by inserting seedlings through the fabric mesh. Any disturbed areas on the downhill/western side of the highway will be replanted with native species, at a minimum ratio of 1:1. The temporary access road will be 200-ft x 8-ft. The RSP will be 130- $cu^3$ below the OHWM.

## Avoidance, Minimization, and Mitigation Measures

To avoid impacting the seep northeast of the drainage inlet at ESHA # 2, ESA fencing and signage will be installed in the field. Work within the riparian channel must occur in the construction window of May 15 and October 15. The DFG will also require that if the drainage is flowing during construction that Caltrans ensure water diversion practices to divert the entire flow around or through the work area during excavation and/or construction activities. If the drainage has flowing water in it, the water will be diverted using gravity flow through temporary culverts/pipes, or pumped around the work site with the use of hoses.

To mitigate for impacts to the riparian vegetation in the western section of ESHA #3, native vegetation will be replanted. The new plantings will mirror the existing native vegetation and will be monitored for 80% survivability for three-years. Caltrans will also provide monitoring reports for the three-year period, as well as providing photographic evidence in the reports for the permitting agencies that the existing vegetation plantings are doing well.

## PM 14.85

No special status plant species listed for Mendocino County have been found to occur at or within 100-ft of the project locations at PM 14.85. The special status plant and wildlife species that are known to occur in Mendocino County and in all ESHAs are provided in Attachment 1.

Botanical studies were conducted within the area extending 100-ft around the project footprint at each project site to satisfy the conditions of the Coastal Element of the Mendocino County General Plan. Due to the steepness of the locations, not all the 100-ft

buffer area was covered on foot. Plants that could not be reached were assumed to be the same species as identical looking plants nearby.

### Affected Environment

Along the immediate east side of the highway, at PM 14.85, the terrain slopes upward at a moderate gradient, and vegetative cover consists mostly of willows. Further up the slope is coastal scrub dominated by coyote brush and sword fern. The vegetation along the west shoulder of the highway is comprised of willows and other riparian vegetation along with Point Arena Creek coastal scrub, native and non-native grasses and forbs, and landscape or common garden plants. The project vicinity is of moderate biological value as it supports native and non-native species. Field studies identified ESHA #4 that runs from the eastern side of the highway, through the existing culvert, and then out to the west. It is located at PM 14.85, in the town of Point Arena. The total area within the study area for ESHA #4 is approximately 19,200- $ft^2$. The section of the ESHA that occurs on the eastern side of the highway is approximately 10,800- $ft^2$, and the section of the ESHA that occurs on the western side of the highway is approximately 8,400- $ft^2$. This ESHA has been identified due to the presence of riparian vegetation. The riparian area is a coastal zone wetland, as defined by the CCC and the Mendocino County LCP.

ESHA #4 is Point Arena Creek or the riparian channel associated with the creek that runs from the eastern side of the highway, through the existing culvert and then out to the west. It is located at PM 14.85, in the town of Point Arena.

ESHA #5 is a hillside supporting coastal scrub.

Field studies identified ESHA #5 located within the southern half of the project area. It begins on the east side of the highway and extends west to the beach. The total area of ESHA # 5 is 0.1 square (sq) miles. This ESHA has been identified by the USFWS as supporting a population of Point Arena mountain beavers (PAMB). This species is federally listed as endangered. The population is documented as occurring on the north-facing slope of the hillside above Point Arena Creek. Field surveys were conducted on July 15, 2008 and did not find any suitable habitat within the project area. The hillside runs approximately one mile from the highway to a bluff over the ocean. The hillside is relatively parallel with the creek, from the highway to the ocean. Caltrans has installed markers along a section of the highway from PM 14.80 to PM 14.50 to permanently identify the hillside as an ESA. The toe of the hillside of ESHA #5 is within 100-ft of an area proposed as a staging area for the project.

For ESHA #4 Point Arena Creek considered a Waters of the US by the USACE, a Waters of the State by the NCRWQCB and a wetland by the local Point Arena Coastal Commission. It supports a healthy population of mixed riparian vegetation and could also be considered a habitat of concern by these agencies.

### Potential Impacts

The eastern and western sections of ESHA #4 will be directly impacted by the construction activities, 400 $ft^2$ or 700-cu3 yd below OHWM. The work within 100-ft of ESHA #4 will include replacing the existing damaged CMP extensions with new 6-ft x 6-ft concrete box culvert extensions of the same length, adding standard wingwalls and aprons to the entrance and exit, and patching the original concrete. No culvert lengthening will occur. All excavation will be by open trench from the adjacent roadway, and total pavement width will stay the same. Temporary impacts include 3,000 $ft^2$ of vegetation will be cut back to allow for construction access and the installation of temporary water diversions. The water diversions will cause 200- $cu^3$ ft of temporary impacts to the riparian area, below the OHWM. Permanent impacts will include 700- $cu^3$ ft of concrete below the OHWM.

Temporary utility relocation will occur within the roadway. This will include minor excavation of the existing roadbed and roadway fill. No impacts will occur to the riparian channel or the creek bed of ESHA #4 due to this particular activity.

There will be no impacts directly to ESHA #5. Caltrans has coordinated with the USFWS regarding potential impacts to the federally endangered PAMB. Field surveys were completed on July 15, 2008, and PAMB were not found to use the project area as habitat. Mr. John Hunter of the Arcata USFWS has agreed in a letter dated July 30, 2008 that the project will "not be likely to result in an incidental take of this species" (please see attachment 3). Impacts to natural communities at ESHA #4 will occur due to the cutting down of the existing vegetation. Approximately 3000-$ft^2$ of vegetation will be cut. No temporary or permanent impacts will occur to the coastal scrub on the hillsides above the creek.

Because the culvert is not being lengthened nor will any widening occur, highway fill will be replaced, rather than stream channel, therefore permanent impacts are limited to the new wingwalls and aprons that will extend into the channel. Permanent impacts are 400-sq-ft of concrete over the channel bottom. The cut back vegetation will be allowed to grow back on its' own. If the vegetation has not reached mature height and density, matching what

currently occurs on-site, then any disturbed areas will be replanted with native species at a minimum ratio of 1:1.

No temporary or permanent impacts will occur within ESHA #5.

## Avoidance, Minimization, and Mitigation Measures

To avoid permanent impacts at PM 14.85, for ESHA #4 Caltrans will cut down the existing vegetation instead of clearing and grubbing the area to allow the native vegetation to re-grow.

No temporary or permanent impact will occur to the coastal scrub on the hillsides above the creek at ESHA #5, as no access will be permitted to this area with the use of ESA fencing and signage that will prohibit equipment and personnel from encroaching on ESHA #5.

Work within the riparian channel must occur in the construction window of May 15 and October 15. The DFG will also require that if the water is flowing through the channel during construction that Caltrans install temporary water diversion to divert the entire flow around or through the work area during excavation and/or construction activities. If the drainage channels have flowing water in, the water will be diverted using gravity flow through temporary culverts/pipes, or pumped around the work site with the use of hoses.

Replacement of riparian vegetation will occur at a 3:1 ratio with monitoring natural plant rejuvenation at ESHAs #4 for three-years. If re-vegetation doesn't occur naturally, Caltrans will plant native vegetation and monitor for success. The DFG construction work window usually limits in-water work and within the riparian channel to occur between May 15 and October 15. For work at ESHA #4 and EHSA #5, the DFG will also require that if the stream is flowing during construction, that Caltrans divert the entire stream flow around, or through the work area during the excavation and/or construction activities. If the stream is flowing it will be diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.

## Conclusion

In conclusion, no permanent impacts for any ESHA detailed within this report will occur as a consequence of the proposed highway project.

## Construction

Construction staging may occur at the Caltrans pullout areas (please see ESHA Assessment mapping, Attachment 2). The staging area at PM 14.85 is within 100-ft of the ESHA for

PAMB and the culvert replacement work is within 100-ft of the riparian ESHA. The temporary detour road at PM 74.74 will be will be within 100-ft of the seep and riparian ESHAs on the east side of the highway. The culvert replacement work and the temporary access road will be within 100-ft of the riparian ESHA on the west side of the highway. The southern pullout area at PM 75.89 may be used as a temporary staging area and it is within 100-ft of the seep ESHA at this location. The project is expected to take up to one year to complete.

1. Overhead power and telephone utilities follow the roadway at all three locations. No relocations are required for the project. Routine maintenance of these utilities will incur the same minimal potential impacts as if the project were not being built.

A two-inch underground water line and an underground telephone conduit at PM 14.85 will need to be temporarily relocated during construction. This work will incur no potential impact because the utilities are within the roadway embankment.

2. Utilization of the all the proposed construction staging areas (included in the Environmental Study Limit mapping, Attachment 1) at all three locations has been environmentally cleared. All vehicles and materials must stay on the pavement or on the hard-packed areas at the pullouts within the project limits.

3. At PM 74.74, an additional 150- $cu^3$ of fill will be needed to provide super-elevation for the traffic lane needed for a detour for construction. The majority of this area is currently an unvegetated roadside pullout. After roadway construction is complete, the pullout will be leveled and any hillside cuts made for the detour will be restored to their original slopes and replanted. Weed-free fill material will be imported from a site that has already been environmentally cleared and will be stockpiled in the staging area shown on the plans.

4. All treated wood waste from guardrail and some signs will either be re-used on-site or by Maintenance, or will be disposed of in an appropriate permitted facility. Additionally, treated wood waste must be tracked by a combination of Caltrans approved reporting and record keeping requirements in accordance with Department of Toxic Substances requirements.

5. As required, traffic control during construction will accommodate bicycle traffic on this portion of the Pacific Coast Bike Route, and accommodate any bicycle races or private bike touring company activities. A traffic management plan may be developed before construction.

Project benefits include stabilization and repair of the roadway and drainage facilities. From an environmental standpoint, a greater benefit is the stabilization of adjacent cut slopes, fill slopes and drainageways that are still experiencing ongoing erosion as a result of the 2005-2006 winter storm damage. As a result of the various erosion control efforts, hydroseeding and replanting that will also be performed, as part of the project will be more successful at re-establishing vegetative cover.

## Visual Impact Anaylsis

### *Regulatory Setting*

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities." [CA Public Resources Code Section 21001(b)].

In addition, Caltrans' policy on "Context Sensitive Solutions" directs designers to consider the proposed project's surroundings and develop transportation solutions that are compatible with those surroundings.

California SR 1 is one of the most highly scenic roadways in the state. The Mendocino County Coastal Commission has created strict regulations on where and how development can occur along the coastal plains. Sec. 20.504.010 of the Visual Resource and Special Treatment Areas section of the Mendocino County Coastal Zoning Code states:

> "The purpose of this section is to insure that permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas."

The visual quality along the existing alignment is highly scenic and the final project design should minimize the effect on the visual setting. This section of Route 1 has been found 'Eligible' for scenic highway designation on the California Scenic Highway System. It is also part of the Pacific Coast Bike Route and gets a sizable amount of touring bicyclists during the summer. The overall visual quality of this area is extremely high.

### *Affected Environment*

The project areas lie between 10 and 150-ft above sea level overlooking the Pacific Ocean in Mendocino County. The environment has views west of the Pacific Ocean, north and south of the coastal bluffs, and east of the Coast Range, which rises above the shoreline. The forest

edge is visible in the middle and background. To the north, riparian woodlands include redwood, Douglas fir, big leaf maple, willow and alder and follow the major stream corridors. Further inland to the east the redwood forest is visible.

Native vegetation in the project areas area characterized by coastal prairie plant community which includes mostly perennial bunch grasses with other herbaceous plants common on the landscape. Most of the shrubs and trees including cypress and shore pine visible in the project area were planted by local residents and are not native to the coastal bluff ecosystem.

### *Impacts*

*Post Mile 14.85*

The proposed project will have negligible impacts to the aesthetic quality of the landscape in this location. Minor removal of riparian vegetation is required for replacement of the culvert drainage system. Visually, mitigation planting is not required. Natural revegetation should occur from the stand of dense riparian woodlands immediately adjacent to the culvert system.

*Post Mile 74.74*

Moderate impacts to existing native vegetation from the proposed project will occur. Existing vegetation will be impacted where the proposal is to place a temporary access road with a rock energy dissipater to the culvert outfall area. Other impacts to existing vegetation will occur from constructing a reinforced embankment and a temporary detour alignment immediately east of the existing alignment. The only activity that will be visible from either the highway or the Pacific Ocean is the minor vegetation removal.

*Post Mile 75.89*

Moderate impacts will occur to the existing vegetation and the visual quality of the landscape in this location due to the extension of an existing culvert. Minimal impacts will occur to the existing vegetation. These elements will not be visible from the highway, but they will be visible from the Pacific Ocean.

### *Avoidance, Minimization, and/or Mitigation Measures*

*Post Mile 14.85*

Revegetation is not required at this location, as native vegetation should occur from the surrounding dense riparian woodland. Post construction monitoring will occur to ensure success.

*Post Mile 74.74*

Revegetation using native shrub and grass species common within the project area should be considered where soil disturbance is to occur.

*Post Mile 75.89*

The proposed down drain will be stained with a color that matches the local geology or minimizes its visibility when viewed from the Pacific Ocean. Additionally, the rock material used for the rock energy dissipater will be similar in color of the local geology found on the coastal bluffs in the project area.

## Storm Water/Water Quality

### *Regulatory Setting*

In 1987 the Clean Water Act was amended and added section 402(p), which defined storm water discharges as point source discharges and established a framework for regulating municipal and industrial storm water discharges under the National Pollutant Discharge Elimination System (NPDES) permitting program. Under this framework, storm water permits are required for urban areas with populations of 100,000 or more (Phase I) – defined as municipal separate storm sewer systems (MS4s). The U.S. EPA defined MS4s to include roads and highways that traverse and serve urban population centers.

As a result, all storm water discharges and non-storm water discharges from all Caltrans properties, facilities, and activities are regulated under Order No. 99-06-DWQ, NPDES NO. CAS000003, NPDES Permit, Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation (Statewide General NPDES Permit).

Caltrans has a revised Storm Water Management Plan (SWMP, July 2003) that includes new and revised best management practices (BMPs) categories, including:

1. Design Pollution Prevention BMPs – Preservation of existing vegetation, concentrated flow conveyance systems, slope/surface protection, etc

2. Treatment BMPs – Infiltration and detention basins, traction sand traps, biofiltration, etc

3. Construction Site BMPs – Temporary soil stabilization and sediment control, non-storm water management, and waste management

**4.** Maintenance BMPs – Litter pickup, materials handling, waste management, street sweeping

The Construction Site BMPs Manual identifies a suite of construction BMPs that can be divided into the following categories: Soil Stabilization, Temporary Sediment Control, Wind Erosion Control, Tracking Control, Non-Storm Water Management, and Waste Management and Material Pollution Control BMPs.

### *Regional Regulatory Setting*

The North Coast Regional Water Quality Control Board (NCRWQCB) has the authority to implement water quality protection standards through the issuance of permits to protect waters of the State of California. Water Quality Objectives for the North Coast Region are specified in the Water Quality Control Plan for the North Coast Region (Basin Plan) prepared in compliance with the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act. The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of both surface waters and groundwater.

A storm water plan is typically required by the NCRWQCB for the Section 401 Certification. THE NCRWQCB 401 Certification application contains the following language:

> **PROPOSED STORM WATER TREATMENT MEASURES (Describe the methods proposed to treat storm water runoff from the project site prior to entering the storm drainage system, wetlands, streams, etc. Please include proper design calculations to indicate that the proposed methods will treat runoff from the 85$^{th}$ percentile/24-hour storm event. See Standard Urban Stormwater Mitigation Plan (SUSMP) Guidelines available at:**
>
> ***http://ci.santa-rosa.ca.us/pworks/other/SW/SRSWManualFinalDraft.pdf, or upon request.)***

## Affected Environment

SR1 PM 14.35 is in the Mendocino Coast Hydrologic Unit (HU), Garcia River Hydrologic Area (HA). PM 74.74 and PM 75.89 are in the Mendocino Coast HU, Rockport HA, Ten Mile River Hydrologic Sub-Area (HAS) 113.13. All locations are within the jurisdictional boundary of the North Coast Regional Water Quality Control Board (NCRWQCB).

### *Potential Impacts*

This project will not impact the beneficial uses of the receiving waters, will not increase impervious surface, and will have less than significant impact on groundwater resources for the project area.

1. The primary constituent of concern is potential sedimentation during construction, as temporary impacts may occur due to increased erosion that could transport sediment into receiving waters.

2. A potential exists for spills and leaks of lubricant, oil and grease, and other fluids associated with vehicles and equipment during construction. An accidental release of these materials may pose a threat to water quality if contaminants enter the drainage system. A spill on the roadway would trigger immediate response actions to report, contain, and mitigate the incident.

### *Avoidance and Minimization Measures*

Point Arena Creek and the Pacific Ocean are the receiving waters for this project. Jurisdictional drainages are located within the project limits and a Section 401 Water Quality Certification will be required. Erosion concerns have been identified at the culvert outlets at PM 74.74 and PM 75.89. The project will not generate more runoff than currently exists.

1. Construction will include all necessary erosion and water quality control practices to minimize potential for sedimentation through use of construction best management practices (BMPs) identified in the Caltrans Water Quality Handbook, Construction Site BMPs Manual. Caltrans approved construction BMPs applicable to this project include measures for temporary sediment control (e.g. silt fences, fiber rolls, straw bale barriers) and temporary soil stabilization (e.g. hydraulic mulching, hydro seeding, straw mulch).

2. Caltrans has contingency plans, procedures, and emergency response crews trained for incident response. These procedures designate a chain of command for notification, evacuation, response, and cleanup of spills resulting from the use and/or transport of hazardous materials.

**3.** A Notice of Construction (NOC) will be filed with the NCRWQCB a minimum of 30-days prior to construction to obtain coverage for the project under the Statewide Construction General Permit. To comply with the conditions of Caltrans' Statewide NPDES Permit, and to address the potential temporary water quality resulting from construction activities, Standard Special provision (SSP) 07-345 will be included as part of the Plans,

Specifications, and Estimates. SSP 07-345 will address water pollution control and implementation of a Strom Water Pollution Prevention Plan (SWPPP) during construction. Source issues will be addressed through SSP 07-346, Construction Site Management that sets forth handling procedures and BMPs for potential sources not addressed by line items in the contract.

# List of Preparers

The following Caltrans North Region staff contributed to the preparation of this Initial Study:

Lupe Jimenez, Senior Environmental Planner. Contribution: Environmental Branch Chief

Beth Thompson, Associate Environmental Planner. Contribution: Environmental Study Coordinator and Document Writer

Erick Wulf, Associate Environmental Planner (Archaeology). Contribution: Historic Property Survey Report (HPSR)

Joan Fine, Associate Environmental Planner (Architectural Historian). Contribution: Historic Property Survey Report.

Encanta Engleby, Pamela Lindholm, Amy Kennedy, Michelle Beachley, Environmental Planner (Natural Science). Contribution: Project biologist, Natural Environment Study (NES) contributions

Mark Melani, Transportation Engineer. Contribution: Initial Site Assessment (Hazardous Waste)

Jim Hibbert, Associate LandscapeArchitect. Contribution: Visual Impact Analysis Report,

Ed Speer, Project Engineer. Contribution: Project description, mapping, project impacts and discussions

Steven Blair, Senior Transportation Engineer. Contribution: Project Manager

Sharon Tang, Air/noise Specialist. Contribution: Air Quality and Noise Reports

Alex Arevalo, Transportation Engineer. Contribution: NPDES Storm Water Coordinator

Dawn Friend, Hydraulic Engineer. Contribution: Fish Passage Assessment PM 14.85

# Attachment 1
# Plant List

**Plants identified in the Pt. Arena/Westport Sink Culvert Replacement Project Study Areas**
**EA 01-47290**

| **PM 75.89** | |
|---|---|
| *Achillea millefolium* | Yarrow |
| *Anagallis arvensis* | Pimpernel |
| *Anaphalis margaritacea* | Pearly everlasting |
| *Avena fatua* | Wild oats |
| *Baccharis pilularis* | Coyote brush |
| *Brassica rapa* | Field mustard |
| *Briza media* | Quaking grass |
| *Bromus diandrus* | Ripgut grass |
| *Carex* sp | Nutsedge |
| *Cortaderia selloana* | Pampas grass |
| *Delosperma litorale* | Ice plant |
| *Equisetum telmateia spp. braunii* | Giant horsetail |
| *Eschscholzia californica* | California poppy |
| *Heracleum lanatum* | Cow parsnip |
| *Hesperolinon californicum* | Western flax |
| *Hirschfeldia incans* | Mustard |
| *Iris douglasiana* | Douglas iris |
| *Lathyrus odoratus* | Sweet pea |
| *Lupinus rivularis* | Lupine |
| *Medicago polymorpha* | Bur clover |
| *Mimulus aurantiacus* | Sticky monkeyflower |
| *Plantago erecta* | English plantain |
| *Raphanus sativus* | Wild radish |
| *Rubus ursinus* | California blackberry |
| *Salix lucida* ssp. *lasiandra* | Pacific willow |
| *Silybum marianum* | Milk thistle |
| *Tropaeolum majus* | Nasturtium |
| *Vicia sativa* | Spring vetch |
| **PM 74.74** | |
| *Achillea millefolium* | Yarrow |
| *Anagallis arvensis* | Pimpernel |
| *Anaphalis margaritacea* | Pearly everlasting |
| *Artemisia douglasiana* | Mugwort |
| *Baccharis pilularis* | Coyote brush |
| *Bellis perennis* | English daisy |
| *Brassica rapa* | Field mustard |
| *Briza media* | Quaking grass |
| *Carex* sp | Nutsedge |
| *Castilleja wightii* | Paintbrush |

| | |
|---|---|
| *Chamomilla suaveolens* | Pineapple weed |
| *Claytonia perfoliata* | Miner's lettuce |
| *Conium maculatum* | Poison hemlock |
| *Cortaderia selloana* | Pampas grass |
| *Cupressus macrocarpa* | Monterey cypress |
| *Equisetum telmateia spp. braunii* | Giant horsetail |
| *Fragaria californica* | Wild strawberry |
| *Gallium sp.* | Bedstraw |
| *Geranium dissectum* | Cutleaf geranium |
| *Hedera helix* | English ivy |
| *Heracleum lanatum* | Cow parsnip |
| *Hesperocnide tenella* | Stinging nettle |
| *Hesperolinon californicum* | Western flax |
| *Hirschfeldia incans* | Mustard |
| *Holus mollis* | Velvet grass |
| *Iris douglasiana* | Douglas iris |
| *Lupinus rivularis* | Lupine |
| *Marah fabaceus* | Wild cucumber |
| *Mimulus aurantiacus* | Sticky monkeyflower |
| *Morella californica* | Pacific bayberry |
| *Narcissus* sp | Daffodil |
| *Plantago erecta* | English plantain |
| *Polystichum munitum* | Sword fern |
| *Pseudotsuga menziesii* | Douglas fir |
| *Pteridium aquilinum* | Bracken |
| *Raphanus sativus* | Wild radish |
| *Ribes sanguineum* | Red flowering current |
| *Rubus ursinus* | California blackberry |
| *Salix lucida* ssp. *lasiandra* | Pacific willow |
| *Salix sitchensis* | Sitka willow |
| *Scrophularia californica* | California bee plant |
| *Silybum marianum* | Milk thistle |
| *Sonchus arvensis* | Field sowthistle |
| *Toxicodendron diversilobum* | Poison oak |
| *Vicia sativa* | Spring vetch |
| *Vinca major* | Vinca |
| **PM 14.85** | |
| *Achillea millefolium* | Yarrow |
| *Artemisia douglasiana* | Mugwort |
| *Brassica rapa* | Field mustard |
| *Briza media* | Quaking grass |
| *Carex* sp | Sedge |
| *Castilleja wightii* | Paintbrush |
| *Cicuta douglasii* | Water hemlock |
| *Claytonia perfoliata* | Miner's lettuce |

| | |
|---|---|
| *Conium maculatum* | Poison hemlock |
| *Equisetum telmateia spp. braunii* | Giant horsetail |
| *Gallium sp.* | Bedstraw |
| *Hedera helix* | English ivy |
| *Heracleum lanatum* | Cow parsnip |
| *Hesperocnide tenella* | Stinging nettle |
| *Hirschfeldia incans* | Mustard |
| *Lonicera involucrata* | Twinberry |
| *Lupinus rivularis* | Lupine |
| *Marah fabaceus* | Wild cucumber |
| *Mimulus aurantiacus* | Sticky monkeyflower |
| *Morella californica* | Pacific bayberry |
| *Plantago erecta* | English plantain |
| *Polystichum munitum* | Sword fern |
| *Potentilla anserine* ssp. *pacifica* | Pacific potentilla |
| *Pteridium aquilinum* | Bracken |
| *Raphanus sativus* | Wild radish |
| *Ribes sanguineum* | Red flowering current |
| *Rubus ursinus* | California blackberry |
| *Salix lucida* ssp. *lasiandra* | Pacific willow |
| *Salix sitchensis* | Sitka willow |
| *Sambucus racemosa* var. *racemosa* | Pacific red elderberry |
| *Scrophularia californica* | California bee plant |
| *Silybum marianum* | Milk thistle |
| *Smilacina racemosa* | False soloman’s seal |
| *Vinca major* | Vinca |

# Attachment 2
# ESHA Mapping


Project Site 1
Environmentally Sensitive Habitat
Area (ESHA) Mapping
Mendocino Co., State Route 1, PM 75.89
EA 01-47290
July 22, 2008


Project Site 2
Environmentally Sensitive Habitat
Area (ESHA) Mapping
Mendocino Co., State Route 1, PM 74.74
EA 01-47290
July 22, 2008


Project Site 3
Environmentally Sensitive Habitat
Area (ESHA) Mapping
Mendocino Co., State Route 1, PM 14.85
EA 01-47290
July 22, 2008

# Attachment 3
# USFWS Letter

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arcata Fish and Wildlife Office
1655 Heindon Road
Arcata, California, 95521
Phone: (707) 822-7201 FAX: (707) 822-8411

In Reply Refer To:
8-14-2008-TA-3478

JUL 30 2008

Ms. Encanta Engleby
Associate Biologist
California Department of Transportation
703 B Street
Marysville, CA 95901

**Subject:** Response to Request for Technical Assistance Regarding Culvert Replacement at Point Arena Creek and Highway 1

Dear Ms. Engleby:

This responds to a request for U.S. Fish and Wildlife Service (Service) technical assistance, received in our office on July 23, 2008. At issue in the request is the potential for incidental take of the federally listed Point Arena mountain beaver (*Aplodontia rufa nigra*) as a result of the proposed replacement of the culvert located at Point Arena Creek and Highway 1, at milepost 14.85 in Mendocino County, California. After review of the information pertaining to this request, the Service provides the following technical assistance.

The Service has determined that replacement of this culvert would not be likely to result in incidental take of Point Arena mountain beavers. All maps and data used to provide this technical assistance are on file at this office. If you have questions regarding this response, please contact Mr. John Hunter of my staff at the Arcata Fish and Wildlife Office at (707) 822-7201.

Sincerely,

Michael M. Long
Field Supervisor